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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/622,356	08/15/2000	Wolfgang Scholl	VAL-487-A	3584

7590

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EXAMINER

BALSIS, SHAY L

ART UNIT	PAPER NUMBER
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1744

DATE MAILED: 04/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/622,356

Applicant(s)

SCHOLL ET AL.

Examiner

Shay L. Balsis

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-14 and 16-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14,22 and 23 is/are allowed.
- 6) ☒ Claim(s) 9-13,16-21 and 24-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9-10, 11-13, 17-21, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schill et al. (USPN 5884357) in view of Beauchet (USPN 3734582) and Current Solutions, Inc.

Schill teaches a wiper arm comprising a single piece connecting rod (figure 2, element 6) (claims 9, 17, 26) pivotally connected to a driving arm (figure 2, element 4) (claims 9, 17, 26) at a first bearing point (figure 2, element 9) (claims 9, 17, 26) and to a control arm (figure 2, element 5) (claims 9, 17, 26) at a second bearing point (figure 2, element 11) (claims 9, 17, 26). There is a hinged part (figure 2, element 16) (claims 9, 17, 26) coupled to the connecting rod at an axis and a wiper blade placeable on the hinged part. It is clearly shown in figure 4 that the inner and outer races are fixed and allow for transmission of radial and axial forces without play (claims 9, 17, 26). The outer race does not rotate whereas a riveted bolt (not labeled but best shown as 19 figure 4) is fitted into the inner race and is axially secured (claims 12, 13, 20-21). The bolt includes a flange having one side resting against the inner ring and an opposite side resting on the drive arm or the control arm (best shown on figure 4) (claim 25). Schill teaches all the essential elements of the claimed invention however fails to teach a co-axial rolling-contact bearing (claim 9, 10, 18) and the material used for the drive and control arm (claims 11, 19).

Art Unit: 1744

The bearing as taught by Schill is a sleeve bearing. Beauchet teaches a deep-groove ball bearing which is a rolling contact bearing (col. 1, lines 5-10) (claims 10, 18). Since both references teach bearing means and the bearing are equivalent structures known in the art for rotating parts, it would have been obvious at the time the invention was made to replace the sleeve bearing with the ball bearing of Beauchet. To further show that it is commonly known in the art to use ball bearing in place of sleeve bearings Current Solutions, Inc., teaches that ball bearings have a longer life, a higher heat endurance, point contact and are quieter at high speeds (At-A-Glance Comparison). Current Solutions teaching using ball bearings in place of sleeve bearings to achieve a greater lifespan and states that ball bearings provide a greater long-term investment (Summary). Therefore it would have been obvious to one of ordinary skill in the art to replace the sleeve bearing of Schill with a ball bearing such as the one taught by Beauchet so as to reduce friction and increase the wear of the joint. Additionally, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the arms out of sheet metal, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious engineering choice. *In re Leshin*, 125 USPQ 416.

Claims 9, 16-17, 24 and 27-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schael et al. (USPN 5860186) in view of Beauchet (USPN 3734582) and Current Solutions, Inc.

Schael teaches a wiper arm comprising a connecting rod (figure 3, element 8) (claims 9, 17) pivotally connected to a driving arm (figure 3, element 3) (claims 9, 17) at a first bearing point (figure 3, element 5) (claims 9, 17) and to a control arm (figure 3, element 2) (claims 9, 17)

Art Unit: 1744

at a second bearing point (figure 3, element 4) (claims 9, 17). There is a hinged part (figure 3, element 20) (claims 9, 17) coupled to the connecting rod at an axis and a wiper blade placeable on the hinged part. It is clearly shown in figure 4 that the inner and outer races are fixed and allow for transmission of radial and axial forces without play (claims 9, 17, 28, 31). The bolt includes a flange having one side resting against the inner ring and an opposite side resting on the drive arm or the control arm (best shown on figure 4) (claim 29). Schael teaches all the essential elements of the claimed invention however fails to teach co-axial rolling-contact bearings in both bearing locations (figure 3, elements 4, 5) (claim 16, 24, 27, 30). The bearing as taught by Schael is a sleeve bearing. Beauchet teaches a deep-groove ball bearing which is a rolling contact bearing (col. 1, lines 5-10) (claims 16, 24, 27, 30). Since both references teach bearing means and the bearing are equivalent structures known in the art for rotating parts, it would have been obvious at the time the invention was made to replace the sleeve bearing with the ball bearing of Beauchet. To further show that it is commonly known in the art to use ball bearing in place of sleeve bearings Current Solutions, Inc., teaches that ball bearings have a longer life, a higher heat endurance, point contact and are quieter at high speeds (At-A-Glance Comparison). Current Solutions teaching using ball bearings in place of sleeve bearings to achieve a greater lifespan and states that ball bearings provide a greater long-term investment (Summary). Therefore it would have been obvious to one of ordinary skill in the art to replace the sleeve bearing of Schael with a ball bearing such as the one taught by Beauchet so as to reduce friction and increase the wear of the joint.

Allowable Subject Matter

Claims 14 and 22-23 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Claims 14 and 22 include the limitation that the riveted bolt is secured by wobble riveting the passage of one of the driving arm and control arm, and by wobble riveting at the inner ring of the roller contact bearing. The prior art and combination of references fails to teach that the riveted bolt is secured by wobble riveting. Therefore claims 14 and 22 are indicated as allowed.

Response to Arguments

Applicant's arguments, see pages 9-11, filed 2/7/05, with respect to Leroy et al. (USPN 4683605) have been fully considered and are persuasive. The rejection of Leroy have been withdrawn.

Applicant's arguments filed 2/7/05, with respect to Schill in view of Beauchet and Schael in view of Beauchet have been fully considered but they are not persuasive.

Applicant argues that there is no teaching or suggestion to replace a sleeve bearing of Schill and Schael with a ball bearing. Examiner stated that it is well known in the art to interchange the bearings, however since the Applicant is questioning the motivation for the combination the Examiner found a teaching stating that ball bearings have a longer life span than sleeve bearings. The provides support for the "well known in the art" statement.

With regards to claim 25, Applicant states that the flange provides a stable connection of the riveted bolt to the deep groove ball bearing and the drive or control arm. Applicant states that the curvature of Schill would not accommodate the flange to provide stability however, the features upon which applicant relies (i.e., no curvature, stability, etc...) are not recited in the

Art Unit: 1744

rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shay L. Balsis whose telephone number is 571-272-1268. The examiner can normally be reached on 7:30-5:00 M-Th, alternating F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Kim can be reached on 571-272-1142. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1744

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Slb
3/30/05


JOHN KIM
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